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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,286	11/15/2000	Hongyong Zhang	0756-2224	4444

31780 7590 03/07/2003

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EXAMINER
MUNSON, GENE M

ART UNIT	PAPER NUMBER
2811	

DATE MAILED: 03/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 712,286	Applicant(s) H. ZHANG ET AL
	Examiner G. MUNSON	Group Art Unit 2811

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 20 February 2003.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-4, 6-9, 21-63 is/are pending in the application.

Of the above claim(s) 21-55 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 6-9, 56-63 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

Examination is continued under 37 CFR 1.114.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-4, 6-9 and 56-63 drawn to a semiconductor device, classified in class 257, subclass 72.

II. Claims 21-55, drawn to processes for making semiconductor devices, classified in class 438, subclass 584.

The inventions are distinct, each from the other because:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of the group I invention would not necessarily imply unpatentability of the group II invention, since the device of the group I invention could be made by processes materially different than those/that of the group II invention, for example, the "optical sensor" of the group I invention need not include a "second amorphous semiconductor" layer as in the processes of the group II invention.

Because these inventions are distinct for the reasons given above and, as shown by the above different classifications, the fields of search are not co-extensive and separate examination would be required, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented group I invention, the group I invention has been constructively elected by original presentation for

prosecution on the merits. Accordingly, claims 21-55 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.145, MPEP 821.03.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 4, 6, 7, 9, 56, 57, 59-61 and 63 are rejected under 35 U.S.C. 102 as unpatentable as shown by Yamamoto et al. See Figure 3. The "bias terminal" and "ground" potential (claims 1, 6, 56, 60) read on the terminal with potential VB.

Claims 3, 8, 58 and 62 are rejected under 35 UC 103 as unpatentable over Yamamoto et al, as in the above rejection, considered together with Ozawa. It would have been obvious to use a shift register as in Ozawa (Figure 1A) to implement a pulse generating circuit 106 as in Yamamoto et al (Figure 3).

Claims 1-4 and 56-59 are rejected under 35 U.S.C. 102 as unpatentable as shown by Morozumi et al. See Figures 1, 3, 12. The "bias terminal" and "ground" potential (claims 1, 56) read on a terminal in Figures 3, 12 which corresponds to a ground terminal in Figure 1; "first" and "second" electrodes read on endpoint contacts to "optical sensor" 18, 109.

Claims 1-4 and 56-59 are rejected under 35 U.S.C. 103 as unpatentable over Morozumi et al. It would have been obvious to provide a bias to a terminal in a device as in Morozumi et al (Figures 3, 12) in order to provide a ground potential as in Figure 1.

The references are of record.

The arguments in the remarks which accompany the amendment, filed 20 February 2003, have been considered but are not persuasive, as noted above.

No claim is allowed.

Any inquiry concerning this communication should be directed to G. Munson at telephone number (703) 308-4925 or 0956.

Munson

3/06/03

Gene M. Munson

GENE M. MUNSON
EXAMINER
GROUP ART UNIT 2811